

Phenomena of Jupiter's Satellites.

Day of Observation.	Satellite.	Phenomenon.	Instrument.	Greenwich Mean Solar Time of Observation. h m s	Greenwich Mean Solar Time of N.A. h m s	Observer.
1881, August 24 (a)	III.	Tr. Ingr. Ext. contact	42-inch telescope	12 38 30	12 46	R.
		Bisection	"	12 43 30±		
		Int. contact	"	12 53 30		
September 19 (b)	II.	Occ. Reapp. First seen	"	10 36 8	10 38	R
		Bisection	"	10 41 20±		
		Ext. contact	"	10 45 19		
21 (c)	I.	Tr. Ingr. Ext. contact	"	11 35 1	11 40	R.
		Bisection	"	11 38 6		
		Int. contact	"	11 42 20		
29 (d)	III.	Tr. Egr. Int. contact	"	8 38 53	8 43	R.
		Bisection	"	8 42 32		
		Ext. contact	"	8 46 51		
29 (e)	I.	Ecl. Disapp. First dim. of brightness	"	9 32 34	9 34 27	R.
		Disappearance	"	9 34 53		
		Tr. Egr. Int. contact	"	9 58 57		
30	I.	Bisection	"	10 2 27	10 5	R.
		Ext. contact	"	10 5 26		

March 1882. *observed at the Radcliffe Observatory.*

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Day of Observation.	Satellite.	Phenomenon.	Instrument.	Greenwich Mean Solar Time of Observation. h m s	Greenwich Mean Solar Time of N.A. h m s	Observer.
October 3 (<i>f</i>)	II.	Ecl. Disapp. First diminution	42-inch telescope	10 54 11	10 55 7	R.
		Last seen	"	10 55 53		
14 (<i>g</i>)	I.	Tr. Ingr. Ext. contact	10-foot Equatoreal	11 22 38		
		Bisection	"	11 25 47	11 26	R.
		Int. contact	"	11 30 37		
14 (<i>h</i>)	I.	Tr. Egr. Int. contact	"	13 29 27		
		Bisection	"	13 33 47	13 37	R.
		Ext. contact	"	13 37 31		
15 (<i>i</i>)	I.	Ecl. Disapp. First diminution	42-inch telescope	7 49 43		
		Half brightness	"	7 50 38	7 51 33	W.
		Disappearance	"	7 51 34		
29 (<i>k</i>)	I.	Ecl. Disapp. First diminution	10-foot Equatoreal	11 39 1		
		Half brightness	"	11 40 1	11 40 41	W.
		Disappearance	"	11 41 9		
November 22 (<i>l</i>)	I.	Tr. Ingr. Ext. contact	"	8 52 52		
		Bisection	"	8 55 6	8 55	W.
		Internal contact	"	8 57 34		
22 (<i>l</i>)	I.	Tr. Egr. Int. contact	"	11 4 18		
		Bisection	"	11 6 24	11 7	W.
		Ext. contact	"	11 8 32		

Day of Observation.	Satellite.	Phenomenon.	Instrument.	Greenwich Mean Solar Time of Observation.	Greenwich Mean Solar Time of N.A.	Observer.
I, November 23 (<i>m</i>) 29 (<i>n</i>)	I.	Ecl. Reapp. First appearance	10-foot Equatoreal	h m s 8 30 38	h m s 8 30 56	W.
	II.	Ecl. Reapp. First seen	"	10 8 37	10 9 1	
		Half brightness	"	10 9 52		
December 7 (<i>o</i>)	I.	Full brightness	"	10 10 57	9 35	W.
		Occ. Disapp. First contact	"	9 31 12		
		Bisection	"	9 33 43		
		Last seen	"	9 36 5		
10-foot Equatoreal. Power = 180.				42-inch Telescope. Power = 100.		

The initials W. and R. are those of Mr. Wickham and Mr. Robinson respectively.

Observers' Remarks.

- (*a*) Cloudy at times. (b) Observation fair. (c) Good images. (d) Observation good. (e) Satisfactory observation.
 (*f*) Satellite followed continuously until 10^h 55^m 50^s, and at the time noted "last seen" (10^h 55^m 53^s) it appeared for a moment, as the faintest possible point, and then vanished. Good observation.
 (*g*) Limb of planet tremulous at times. (h) Limb of planet not well defined at times. (i) Images ill defined.
 (*i*) Observation difficult, owing to bad image. (k) Observation good. (l) Images ill defined.
 (*m*) Observation considered good, but images diffused. (n) and (o) Observations good.